

## REMARKS

The Examiner's withdrawal of the objection to the drawings is noted with appreciation.

Claims 1 to 15 remain in the application. The allowance of claims 8 to 11 is noted with appreciation, as is the indication that claims 12 to 14 would be allowed if the rejections under 35 U.S.C. §§101 and 112 are overcome. The withdrawal of the rejection of claims 1, 8 and 15, as amended, under 35 U.S.C. §112, first and second paragraphs, is also noted with appreciation.

Claim 15 was newly rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement. This rejection is respectfully traversed for the reasons that, contrary to the Examiner's position, one skilled in the art to which the invention pertains could make and use the invention.

The Examiner takes the position that "It is unclear as to whom or what is performing the steps of modeling, maintaining the server allocations, associating each customer's demand and reducing a minimum-cost as claimed." In response, Applicants state that the steps of modeling, associating demand, and reducing a minimum-cost network flow problem are carried out by the practitioner. Maintaining the server allocations (via solving the network flow problem) is carried out by computer. This is clearly supported by the specification as filed.

Claims 5 to 7 and 12 to 14 were newly rejected under 35 U.S.C. §112, second paragraph, as being indefinite. The basis for the rejection was that, in claims 5 and 12, an intangible benefit is recited and, in claims 7 and 12, the resource is recited as computer cycles and resource allocation is done to more efficiently solve computationally intensive problems. This rejection is respectfully traversed for the reason that the claims as presented are in fact clear and definite.

Concerning the term "intangible benefit", customer satisfaction and computer cycles are both intangible. What the claimed invention provides is the ability to quantify the benefit in some way. A user of the invention is able to assign a numeric value to the customer satisfaction yielded by the allocation of a resource (possibly a different value for each possible amount of allocation). The claimed invention can then be used to maximize the aggregate value of the various

clients' measures of customer satisfaction. Computer cycles are clearly quantifiable. One skilled in the art understands what a computationally intensive problem is and, further, if the number of computer cycles needed to solve such problems is reduced, the solution is obtained more efficiently.

Claims 5, 6, 12 and 13 were newly rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter. This rejection is also respectfully traversed. This rejection is related to the rejection of the same claims under Section 112, second paragraph, above. Specifically, the Examiner states that "The claims are directed to 'intangible benefits,' which are neither a process nor machine, thus making them non-statutory." The Examiner has misrepresented what is in fact being claimed. The claims are not "directed to 'intangible benefits'; rather, the benefit which is realized due to resource allocation according to the invention is intangible. As stated above, customer satisfaction is an intangible benefit, but it is capable of being quantified. Although not included in this rejection, computer cycles may be considered an intangible benefit; however, it is noted that the Examiner has not included claims 7 and 14 in the rejection.

Claims 1 to 7 were additionally newly rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,216,593 to Dietrich et al. in view of U.S. Patent Application Publication No. 2003/0037146 to O'Neill. This rejection is respectfully traversed for the following reasons.

Submitted herewith are declaration under 37 C.F.R. §1.131 of Tracy J. Kimbrel and Jayram S. Thathachar, both named co-inventors of the invention disclosed and claimed in this patent application. Both declarations have attached as Exhibit A a copy of a publication entitled "Online server allocation in a server farm via benefit task systems" published in *Proceedings of the 2001 ACM Symposium on the Theory of Computing*, pages 540–549, on July 6, 2001. The earliest effective date of the O'Neill publication is August 16, 2001. At Section 8, "Experimental results", of Exhibit A of the Kimbrel and Thathachar declarations are details of the results of experiments conducted to demonstrate the actual operation of the invention and concludes with a table that shows the algorithms' performance. These experiments and the successful results constituted an actual reduction to practice prior to the earliest effective date of the O'Neill publication..

Therefore, the O'Neill publication is not an effective reference against the disclosed and claimed invention. These declarations were not earlier submitted since the Examiner had not before relied on the O'Neill publication. The submission of these declarations is therefore timely and effective to eliminate the O'Neill publication as a reference against this patent application.

The Dietrich et al. patent was discussed in some detail in the amendment filed on July 25, 2005, and those comments are included herein by reference. To assist the Examiner in her reconsideration of the application, a feature of the claimed invention not suggested by either the Dietrich et al. patent or the O'Neill publication nor yielded by combining the two is as follows. The claimed invention is capable of allocating resources such that a resource can not be used by any customer for some length of time between its use by one customer and its use by a different customer. That is, it takes some amount of time to ready the resource for a new customer.

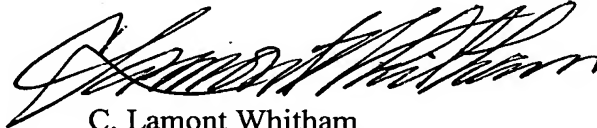
Since the O'Neill publication is not an effective reference against this application, the rejection under 35 U.S.C. §103(a) should be withdrawn.

In view of the foregoing, it is respectfully requested that the application be reconsidered, that claims 1 to 7 and 12 to 15 be allowed together with previously allowed claims 8 to 11, and that the application be passed to issue. In the alternative, it is requested that this amendment be entered for purposes of appeal

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

A provisional petition is hereby made for any extension of time necessary for the continued pendency during the life of this application. Please charge any fees for such provisional petition and any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 50-2041.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "C. Lamont Whitham", is written over the typed name.

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